

CLAIMS:

1. A method to configure a network device, comprising:
receiving a request to configure a first permanent virtual circuit (PVC) between a
5 digital subscriber line (DSL) device and a DSL access module (DSLAM); and
automatically configuring said first PVC using one of a plurality of PVC auto-
configuration algorithms.

10 2. The method of claim 1, wherein said automatically configuring comprises:
selecting a first PVC auto-configuration algorithm;
executing said selected PVC auto-configuration algorithm;
determining whether said first PVC has been configured; and
selecting a second PVC auto-configuration algorithm in accordance with said
determination.

15 3. The method of claim 2, wherein said selecting a second PVC auto-configuration
algorithm comprises:

determining said first PVC auto-configuration algorithm has failed;
analyzing results of said first PVC auto-configuration algorithm; and
20 selecting said second PVC auto-configuration algorithm using said results.

4. The method of claim 1, further comprising:
receiving a request to configure a second PVC for said DSL device;

receiving configuration information for said second PVC; and
 configuring said second PVC using said configuration information.

5. The method of claim 4, wherein said configuration information may comprise a
 5 virtual channel identifier (VCI) and a virtual path identifier (VPI).

6. The method of claim 1, wherein each of said PVC configuration algorithms
 comprise a PVC auto-configuration algorithm consisting essentially one of the following:
 PVC hunt, integrated local management interface (ILMI) PVC auto-configuration, and
 10 PVC probing.

7. The method of claim 1, further comprising:
 sending a message that said first PVC was not configured after each of said
 plurality of PVC auto-configuration algorithms have been used; and
 15 receiving configuration information for said first PVC from a user.

8. A system to configure a network device, comprising:
 a digital subscriber line (DSL) customer premise equipment (CPE);
 a DSL access module (DSLAM) connected to said DSL CPE; and
 20 a DSL configuration manager to configure a permanent virtual circuit (PVC)
 between said DSL CPE and said DSLAM using one of a plurality of auto-configuration
 algorithms.

9. The system of claim 8, wherein said DSL CPE comprises a DSL CPE consisting essentially one of the following: an asynchronous DSL (ADSL)/asynchronous transfer mode (ATM) router and an ADSL/ATM bridge.

10. The system of claim 8, wherein said PVC may be configured using configuration information comprising a virtual channel identifier (VCI) and a virtual path identifier (VPI).

11. A configuration manager for a network device, comprising:

a detection module to detect connection of a digital subscriber line (DSL) device with a DSL access module (DSLAM);

a configuration module to configure a permanent virtual circuit (PVC) between said DSL device and said DSLAM using one of a plurality of PVC auto-configuration algorithms.

12. The configuration manager of claim 11, wherein said configuration module comprises:

a selection module to select a PVC auto-configuration algorithm;

a validation module to confirm configuration of said PVC; and

an analysis module to provide selection information to said selection module to select another PVC auto-configuration algorithm in accordance with results from said validation module.

13. The configuration manager of claim 11, wherein said PVC may be configured using configuration information comprising a virtual channel identifier (VCI) and a virtual path identifier (VPI).

14. An article comprising:

a storage medium;

said storage medium including stored instructions that, when executed by a processor, result in receiving a request to configure a first permanent virtual circuit (PVC) between a digital subscriber line (DSL) device and a DSL access module (DSLAM), and automatically configuring said first PVC using one of a plurality of PVC auto-configuration algorithms.

15. The article of claim 14, wherein the stored instructions, when executed by a processor, result in automatically configuring said first PVC by selecting a first PVC auto-configuration algorithm, executing said selected PVC auto-configuration algorithm, determining whether said first PVC has been configured, and selecting a second PVC auto-configuration algorithm in accordance with said determination.

16. The article of claim 14, wherein the stored instructions, when executed by a processor, result in selecting a second PVC auto-configuration algorithm by determining said first PVC auto-configuration algorithm has failed, analyzing results of said first PVC auto-configuration algorithm, and selecting said second PVC auto-configuration algorithm using said results.

17. The article of claim 14, wherein the stored instructions, when executed by a processor, further result in receiving a request to configure a second PVC for said DSL device, receiving configuration information for said second PVC, and configuring said
5 second PVC using said configuration information.

18. The article of claim 14, wherein the stored instructions, when executed by a processor, further result in sending a message that said first PVC was not configured after each of said plurality of PVC auto-configuration algorithms have been used, and
10 receiving configuration information for said first PVC from a user.